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UNITED STATES PATENT AND TRADEMARK OFFICE

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10/024,051	12/21/2001	Daniel E. Knauss	088305-0143	5332

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EXAMINER
HONEYCUTT, KRISTINA B

ART UNIT	PAPER NUMBER
2178	

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

(

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/024,051	KNAUSS ET AL.
	Examiner	Art Unit	
	Kristina B. Honeycutt	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _06 January 2005_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-20_ is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-20_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _21 December 2001_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _2/9/05_.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to the amendment filed on January 6, 2005; Information

Disclosure Statement filed February 9, 2005.

This action is made Final.

2.   Claims 1-20 are pending in the case. Claims 1, 5, 8, 12 and 15 are independent

claims.

Information Disclosure Statement

3.   The information disclosure statement (IDS) submitted on February 9, 2005. The

submission is in compliance with the provisions of 37 CFR 1.91. Accordingly, the

information disclosure statement is being considered by the examiner.

Drawings

4.   The objection to the drawings as failing to comply with 37 CFR 1.84(p)(5)

because they do not include the reference sign 810 from page 19 of the specification

has been withdrawn as necessitated by the amendment.

Claim Objections

5.   Claim 5 is objected to because of the following informalities: "receiverd" in line

10 should be "received". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6.   Claims 1-3, 5, 8, 12, and 15 remain rejected under 35 U.S.C. 102(b) as being

anticipated by Edwards et al. (U.S. Patent 5557780; date of patent September 17, 1996;

filed April 20, 1995).

Regarding independent claim 1, Edwards discloses a computer implemented method

of automatically generating Electronic Data Interchange (EDI) documents or messages

using an EDI system, comprising:

- storing a plurality of maps for respective mapping metadata from different types

  of source documents to variables of a virtual document (Fig. 15; col. 6, lines 13-

  19 – as demonstrated in the figure and cited text, maps are stored since Edwards

  teaches loading maps used for mapping);

- receiving a source data model having a first EDI format corresponding to EDI

  related data, the source data model including metadata (col. 6, lines 60-64; col.

  7, lines 23-47 – as demonstrated in the cited text, a "source data model" is

  received including an EDI format and "metadata");

- determining a type of the source data model from the metadata (col. 6, lines 63-

  67; col. 7, lines 1-7, 23-34 – as demonstrated in the cited text, a type is

  determined);

- obtaining a first map from the plurality of maps based on the determined type of

  the source data model, and mapping the metadata of the source data model to

  corresponding variables of a virtual document in accordance with the first map

  (Fig. 3; col. 4, lines 41-49; col. 6, lines 63-67; col. 7, lines 1-7, 48-61 – as

  demonstrated in the figure and cited text, the "metadata" is mapped to the

  variables of a "virtual" document based on the determined type and map);

- determining a type of a target data model to which data from the source data

  model is to be transferred to (col. 7, lines 15-21, 62-67; col. 7, lines 1-7 – as

  demonstrated in the cited text, a type of a target is determined);

- obtaining a second map from the plurality of maps based on the determined type

  of the target data model, and mapping the variables of the virtual document to

  metadata of a target data model having a second EDI format in accordance with

  the second map (Fig. 15; col. 7, lines 15-21, 62-67; col. 8, lines 1-7; col. 11, lines

  51-61 – as demonstrated in the figure and cited text, the variables are mapped to

the "metadata" of the target model with a second EDI format based on type and

map).

Regarding dependent claim 2, Edwards discloses the method according to claim 1,

wherein:

- when a source message or document is inputted to the EDI system, the source

  message or document is translated to obtain its corresponding metadata, and the

  values corresponding to the metadata are provided to the corresponding mapped

  variables of the virtual document at run time (col. 6, lines 60-67; col. 7, lines 1-7;

  col. 8, lines 15-27; col. 9, lines 62-64 – as demonstrated in the cited text, a

  source document is inputted and translated to obtain its corresponding

  "metadata" and the values are provided to the corresponding mapped variables

  of the "virtual" document at run time); and

- the corresponding values of the mapped variables of the virtual document are

  provided to the corresponding metadata of the target data model, so as to

  populate the target data model with data from the source data model (col. 7, lines

  15-21, 62-67; col. 8, lines 1-7 – as demonstrated in the cited text, the

  corresponding values of the mapped variables are provided to the corresponding

  "metadata" of the target data model to populate the target with data from the

  source).

Regarding dependent claim 3, Edwards discloses the method according to claim 2, wherein:

- the first EDI format is a data transaction formatting standard, and the second EDI format is a data transaction formatting standard (abstract – as demonstrated in the cited text, the EDI formats are data transaction formatting standards).

Regarding independent claim 5, Edwards discloses a system for automatically generating data in a self-describing markup language format from received EDI data, comprising:

- a storing unit that stores a plurality of maps for respectively mapping metadata from different types of source documents to variables of a virtual document (Fig. 1, 15; col. 6, lines 13-19 – as demonstrated in the figures and cited text, maps are stored since Edwards teaches loading maps used for mapping);

- a receiving unit that receives a message or document from a first trading partner as EDI data (col. 6, lines 60-64; col. 7, lines 23-28 – as demonstrated in the cited text, a "receiving unit" receives a document from a "first trading partner" as EDI data);

- a determining unit that determines a type of the message or document received from the metadata and that determines a type of a target data model (col. 6, lines 63-67; col. 7, lines 1-7, 15-34, 62-67; col. 8, lines 1-7 – as demonstrated in the cited text, the types are determined);

- a virtual document that obtains a first map from the plurality of maps stored in the storing unit based on the type of the message or document as determined by the determining unit, and that maps metadata from the message or document of the first trading partner to variables of the virtual document in accordance with the first map, and that obtains a second map from the plurality of maps stored in the storing unit based on the type of the target data model as determined by the determining unit, and that maps metadata from a message or document of a second trading partner to the variables of the virtual document in accordance with the second map (Fig. 3, 15; col. 4, lines 41-49; col. 6, lines 63-67; col. 7, lines 1-7, 15-21, 48-67; col. 8, lines 1-7; col. 11, lines 51-61 – as demonstrated in the figures and cited text, a "virtual" document maps "metadata" from the first document to variables of the "virtual" document and maps "metadata" from a document of a "second trading partner" to the variables of the "virtual" document based on types and maps); and

- a transmitting unit that transmits values provided to the variables of the virtual document from the message or document from the first trading partner, to the corresponding metadata of the message or document of the second trading partner (col. 7, lines 15-21, 62-67; col. 8, lines 1-7 – as demonstrated in the cited text, a "transmitting unit" transmits values provided to the variables of the "virtual" document from the first document to the corresponding "metadata" of the document of the "second trading partner").

Regarding independent claim 8, the claim reflects program code for performing the steps of the method as claimed in claims 1 and 2 and is rejected along the same rationale.

Regarding independent claim 12, the claim reflects the system for generating data in a self-describing markup language from received EDI data as claimed in claim 5 and is rejected along the same rationale.

Regarding independent claim 15, the claim reflects a method for generating data from EDI documents as claimed in claim 1 and is rejected along the same rationale.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 4, 7, 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards in view of Yee et al. (U.S. Patent 6738975; date of patent May 18, 2004; filed October 5, 1999) in further view of Bloom et al. (U.S. Patent

6871331; date of patent March 22, 2005; filed June 13, 2003; continuation filed May 4,

2000).

Regarding dependent claim 4, Edwards discloses the variables of the virtual

document are assigned semantic names representative of a type of data to be stored to

the variables (Figure 4; col. 8, lines 15-27).

Edwards does not disclose the maps are created by a user prior to receiving the

source data model, based on an intuitive correspondence made by the user from a

particular metadata name of one of the metadata of the source data model and a

particular semantic name of one of the variables of the virtual document. Yee teaches a

user creating a map (col. 21, lines 37-41) but does not teach the map based on

metadata name and variable name. Bloom teaches mapping based on data and names

(col. 3, lines 42-45; col. 4, lines 59-61). It would have been obvious to one of ordinary

skill in the art, having the teachings of Edwards, Yee and Bloom before him at the time

the invention was made, to modify variables assigned names as taught by Edwards to

include creating maps as taught by Yee and mapping based on names as taught by

Bloom, because allowing the user to create maps, as taught by Yee (col. 21, lines 37-

41) would ensure that the mapping is performed in a manner that produces an outcome

corresponding to the user's wishes.

Regarding dependent claims 7, 11, 14, the claims reflects the systems and computer readable data storage medium wherein the variables are assigned names as claimed in claim 4 and are rejected along the same rationale.

8.   Claims 6, 9, 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards et al. (U.S. Patent 5557780) in view of Roberts et al. (U.S. Pub. No 20030135584).

Regarding dependent claim 6, Edwards does not disclose the self-describing markup language format is XML. Roberts teaches XML as a self-describing markup language (p.2, para. 34). It would have been obvious to one of ordinary skill in the art, having the teachings of Edwards and Roberts before him at the time the invention was made, to modify using any EDI format as taught by Edwards (abstract) to include XML as the self-describing markup language as taught by Roberts, because XML provides a protocol where the type of data being used can be identified, as taught by Roberts (p.2, para. 35). It would have been advantageous to one of ordinary skill to utilize such combination because XML would allow variables to be named so that the names represented the type of data stored in the variables.

Regarding claims 9, 10 and 13, the claims reflect a self-describing markup language and XML as claimed in claim 6 and are rejected along the same rationale.

9.   Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Edwards in view of Goldberg et al. (U.S. Patent 6598046; date of patent July 22, 2003;

filed September 29, 1998).

Regarding dependent claim 16, Edwards does not disclose obtaining, from a

database, source-independent data that is used to provide predetermined values for at

least one of the metadata of the target data model. Goldberg teaches predetermined

values for metadata in a database (col. 12, lines 47-50). It would have been obvious to

one of ordinary skill in the art, having the teachings of Edwards and Goldberg before

him at the time the invention was made, to modify the method taught by Edwards to

include a database with predetermined values as taught by Goldberg, because a

database containing predetermined values, as taught by Goldberg (col. 12, lines 47-50),

would ensure that all metadata contains a value since those that are not assigned

values would be given the predetermined value.

Regarding claims 17, 18, 19 and 20, the claims reflect the systems, computer

readable data storage medium and method for performing the operations of claim 16

and are rejected along the same rationale.

Response to Arguments

10.   Applicant's arguments filed January 6, 2005 have been fully considered but they are not persuasive. Regarding independent claim 1, Applicants indicate that the use of stored maps, mapping variables of a document to metadata of a target and determinations of type are not disclosed by the cited art (p.12, lines 19-23). The Examiner disagrees because Edwards teaches loading maps (col. 6, lines 13-19) so the maps must be stored. Edwards also teaches mapping variables and making determinations (col. 6, lines 63-67; col. 7, lines 15-21, 62-67; col. 8, lines 1-7; col. 11, lines 51-61).

Claims 5, 8, 12 and 15 recite similar features with respect to independent claim 1 and are rejected at least based on the rationale of the rejection above.

Claims 2-4, 6, 7, 9-11, 13, 14 and 16-20 depend from independent claims 1, 5, 8, 12 and 15. Therefore claims 2-4, 6, 7, 9-11, 13, 14 and 16-20 are rejected at least based on the rationale of the rejection above.

Regarding dependent claims 4, 7, 11 and 14, Applicants indicate that maps created by a user are not disclosed by the cited art (p.13, lines 20-27). The Examiner disagrees because Yee and Bloom teach maps created by a user based on data and names (see rejections above).

Regarding dependent claims 16-20, Applicants indicate that these claims recite

features not disclosed by the cited art (p.14, lines 2-4). The Examiner disagrees

because Goldberg teaches predetermined values for metadata in a database (col. 12,

lines 47-50).

Conclusion

11.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

12.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

- System and method for event-driven data transformation (U.S. Patent 6795868),

- Representation and processing of EDI mapping templates (U.S. Patent 6418400),

- Method and apparatus for interfacing application system via the Internet (U.S. Pub. No. 20020091974).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristina B. Honeycutt whose telephone number is 571-272-4123. The examiner can normally be reached on 8:00 am - 5:00 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KBH

CESAR PAULA
PRIMARY EXAMINER